

Claims

1. Apparatus for dispensing foam comprising a source of foam and a dispensing device, the dispensing device comprising:

5 (a) an inlet in communication with the source of foam;
(b) a usable foam outlet;
(c) a waste bleed outlet communicating with the inlet, the bleed outlet having a higher resistance to flow of foam than that of the usable foam outlet.

10 2. Apparatus as claimed in claim 1 wherein the waste bleed outlet is located adjacent the usable foam outlet.

3. Apparatus as claimed in claim 1 or claim 2 further comprising a second waste outlet communicating with the usable foam outlet.

15 4. Apparatus as claimed in claim 3 wherein the second waste outlet has a lower resistance to flow of foam than that of the waste bleed outlet.

5. Apparatus as claimed in claim 3 or claim 4 wherein the communication 20 between the second waste outlet and the usable foam outlet is via a valve arrangement

6. Apparatus as claimed in claim 5 wherein the valve arrangement comprises a diaphragm member.

25 7. Apparatus as claimed in any preceding claim comprising a substantially enclosed waste chamber with which the waste bleed outlet communicates.

8. Apparatus as claimed in claim 7 wherein at least a portion of a wall of the waste chamber is transparent to allow inspection of foam in the chamber.

9. Apparatus as claimed in claim 7 or claim 8 wherein the waste chamber forms an integral part of the dispensing device.

10. A device for dispensing foam comprising:

5 (a) an inlet for communication with a source of foam;

(b) a usable foam outlet;

a waste bleed outlet communicating with the inlet, the bleed outlet having a higher resistance to flow of foam than that of the usable foam outlet; and

(c) a connector for mechanically securing the device to a source of foam.

10 11. A device as claimed in claim 10 wherein the waste bleed outlet is located adjacent the usable foam outlet.

15 12. A device as claimed in claim 10 or claim 11 further comprising a second waste outlet communicating with the usable foam outlet.

13. A device as claimed in claim 12 wherein the second waste outlet has a lower resistance to flow of foam than that of the waste bleed outlet.

20 14. A device as claimed in claim 12 or claim 13 wherein the communication between the second waste outlet and the usable foam outlet is via a one way valve arrangement

25 15. A device as claimed in claim 14 wherein the one way valve arrangement comprises a diaphragm member.

16. A device as claimed in any of claims 10 to 15 comprising a substantially enclosed waste chamber with which the waste bleed outlet communicates.

30 17. A device as claimed in claim 16 wherein at least a portion of a wall of the waste chamber is transparent to allow inspection of foam in the chamber.

18. A device as claimed in claim 16 or claim 17 wherein the waste chamber forms an integral part of the device.

5 19. A kit comprising a device as claimed in any of claims 10 to 18 in combination with a foam source, the said source being provided with a connector complementary to that of the dispensing device and with a foam outlet complementary to the foam inlet of the dispensing device.

10 20. A kit as claimed in claim 19 further comprising a syringe.

21. A kit as claimed in claim 19 or claim 20 wherein the foam source comprises a first canister containing liquid to be foamed and a second canister containing pressurized gas for charging the said first canister prior to generation of foam.

15 22. An assembly comprising a device as claimed in any of claims 10 to 18 in combination with a syringe, wherein the nozzle of the syringe is fitted into the usable foam outlet, and wherein the usable foam outlet with the syringe nozzle fitted therein has a lower resistance to flow of foam than that of the waste bleed outlet.

20 23. An assembly as claimed in claim 22 wherein the syringe nozzle is a standard luer nozzle and the usable foam outlet of the dispensing device is configured as a female luer connector.

25 24. An assembly as claimed in claim 22 wherein the syringe comprises a plunger having a projection extending into a nozzle of the syringe, whereby dead space in the syringe is minimised.

30 25. Apparatus as claimed in any of claims 1 to 9 wherein the source of foam comprises a canister charged with liquid and gas under pressure.

26. A method of dispensing foam comprising the steps of:

- (a) dispensing foam to waste;
- (b) observing the said foam being dispensed to waste and making a determination as to when the foam is of a predetermined quality;
- 5 (c) once the foam is of the said predetermined quality, dispensing foam to a separate location for subsequent use, whilst continuing to dispense foam to waste;
- (d) wherein the rate at which foam is dispensed to waste is lower than the rate at which foam is dispensed to the said separate location for subsequent use.

10 27. A method of dispensing foam using the apparatus claimed in any of claims 1 to 9 comprising the steps of:

- (a) providing a syringe fitted to the usable foam outlet of the dispensing device;
- (b) whilst holding a plunger of the syringe in a fully depressed position, 15 causing foam from the source to flow into the foam inlet of the dispensing device and thence out of the waste bleed outlet;
- (c) observing the said foam exiting the waste bleed outlet;
- (d) when the said foam exiting the bleed outlet is observed to have a predetermined quality, releasing the plunger of the syringe, whereby the syringe fills with 20 foam.

28. A method of dispensing foam from a pressurized container comprising the steps of:-

- (a) initially dispensing a continuous flow of foam to waste; and then
- 25 (b) subsequently diverting at least a proportion of the said flow of foam to a vessel for further use, without substantial interruption of the flow of foam from the canister.